

FIG. 1A

1 TTTCCTCACTGACTATAAAAGAATAGAGAAGGAAGGGCTTCAGTGACCGGCTGCCTGGCTGACTTACAGCAGTCAGACTCTGACAGGATC
 91 ATGGCTATGATGGAGGTCCAGGGGGACCCAGCCTGGGACAGACCTGCGTGCTGATCGTGATCTTCACAGTGCTCCTGCAGTCTCTCTGT
 1 MetAlaMetMetGluValGlnGlyGlyProSerLeuGlyGlnThrCysValLeuIleValIlePheThrValLeuLeuGlnSerLeuCys
 181 GTGGCTGTAACCTACGTGTACTTTACCAACGAGCTGAAGCAGATGCAGGACAAGTACTCCAAAAGTGGCATTGCTTGTCTTCTTAAAGAA
 31 ValAlaValThrTyrValTyrPheThrAsnGluLeuLysGlnMetGlnAspLysTyrSerLysSerGlyIleAlaCysPheLeuLysGlu
 271 GATGACAGTTATTGGGACCCCAATGACGAAGAGAGTATGAACAGCCCCTGCTGGCAAGTCAAGTGGCAACTCCGTCAGCTCGTTAGAAAG
 61 AspAspSerTyrTrpAspProAsnAspGluGluSerMetAsnSerProCysTrpGlnValLysTrpGlnLeuArgGlnLeuValArgLys
 361 ATGATTTTGAAGACCTCTGAGGAAACCATTTCTACAGTTCAAGAAAAGCAACAAATATTTCTCCCTAGTGAGAGAAAAGAGGTCCTCAG
 91 MetIleLeuArgThrSerGluGluThrIleSerThrValGlnGluLysGlnGlnAsnIleSerProLeuValArgGluArgGlyProGln
 451 AGAGTAGCAGCTCACATAACTGGGACCAGAGGAAGAAGCAACACATTGTCTTCTCCAACTCCAAGAATGAAAAGGCTCTGGGCCGCAA
 121 ArgValAlaAlaHisIleThrGlyThrArgGlyArgSerAsnThrLeuSerSerProAsnSerLysAsnGluLysAlaLeuGlyArgLys
 541 ATAAACTCCTGGGAATCATCAAGGAGTGGGCATTTCCTGAGCAACTGCACTTGAAGGAATGGTGAAGTGGTCATCCATGAAAAGGG
 151 IleAsnSerTrpGluSerSerArgSerGlyHisSerPheLeuSerAsnLeuHisLeuArgAsnGlyGluLeuValIleHisGluLysGly
 631 TTTTACTACATCTATTCCCAAACATACTTTTCGATTTCAGGAGGAAATAAAAGAAAACACAAAGAACGACAAACAAATGGTCCAATATATT
 181 PheTyrTyrIleTyrSerGlnThrTyrPheArgPheGlnGluGluIleLysGluAsnThrLysAsnAspLysGlnMetValGlnTyrIle
 721 TACAAATACACAAGTTATCCTGACCTATATTGTTGATGAAAAGTGCTAGAAATAGTTGTTGGTCTAAAGATGCAGAATATGGACTCTAT
 211 TyrLysTyrThrSerTyrProAspProIleLeuLeuMetLysSerAlaArgAsnSerCysTrpSerLysAspAlaGluTyrGlyLeuTyr
 811 TCCATCTATCAAGGGGGAATATTTGAGCTTAAGGAAAATGACAGAATTTTGTCTGTAAACAAATGAGCACTTGATAGACATGGACCAT
 241 SerIleTyrGlnGlyIlePheGluLeuLysGluAsnAspArgIlePheValSerValThrAsnGluHisLeuIleAspMetAspHis
 901 GAAGCCAGTTTTTTTCGGGGCCTTTTTAGTTGGCTAACTGACCTGGAAAGAAAAGCAATAACCTCAAAGTGACTATTTCAGTTTTTCAGGAT
 271 GluAlaSerPhePheGlyAlaPheLeuValGlyStp
 991 GATACACTATGAAGATGTTTCAAAAAATCTGACCAAAACAAACAAACAGAAA

FIG. 1B

41BBL 80 DPAGLLDLRQGMFAQDLVAQ-----NVLLIDGP[]-----S[W]YSDPGLAGVS[]TG-[]GLSYKEDTKE[]LVVA
 OX40L 52 VSH---RYPRIQSIKVQFT-----EYKKEKG-----F--ILTS---QKED-IMKVQNN--SVIIN
 CD27L 45 QQQLPLESLGWDVAELQLN-----HTG[P]QDPRL-----Y[W]QGGPALGRS[]FLH-[]GPE[]DKG--QLRIH
 CD30L 87 LCILKRAPFKKSWAYLQVA-----KHLNKT[]K[]-----S[W]NKD---GILH-[]GVRYQDG--NLVIO
 TNF 77 VRSSRTPSDKPVAHVVAN-----PQAEQGL-----QWLNRRAN--ALLAN-GVELRDN--QLVVP
 LTb 77 EEPETDLSPGLPAAHLIGA-----PLKGQGL-----GWETTKEQ--AFLTS-GTQFSDA-EGLALP
 LTa 52 PKMHLAHSTLKPAAHLIGD-----PSKQNSL-----LWRANTDR--AFLQD-GFSLNN--SLLVVP
 CD40L 113 MQ--KGDQNPQIAAHVISE-----ASSKTTSVL-----QWAEKGY--TMSNN-LVTLENG-KQLTVK
 Apo1L 134 PSPPPEKKELRKVAHLTGK-----SNSRSMPL-----EWEDTYGIV-VLLS-[]GVKYKKG--GLVIN
 Apo2L 114 VRE---RGQRVAAHITGTGRSNTLSSPNSKNEKALGRKINSWESSRSGH-SFLS--NLHLRNG--ELVIH

41BBL 137 KAGVYVYVFFQLELRRVVAEGS---GSVSLALHLQPLRSAGAAALALTVDLPPAS-----
 OX40L 97 CDGFFYLISLKGYSQE-----VNISLH-YQKDE--EP-LFQLKKVRSVN-----
 CD27L 100 RDGIYMVHIOVTLAICSSTTASRH--HPTTLAVGICSPAS---RSISLLRLSFH-----
 CD30L 135 FPGLYFIILCQLQLVQCP-----NNSVDLKLLELLINKHI--KKQALVTVCES-----
 TNF 128 SEGILYIYSQVLFKGGQCP-----STHVLLTHTISRIAVSY-OTKVNLLSAIKSPCQRETPE---
 LTb 129 QDGLYLYLYCLVGYRGRAPPGGDPQGRSVTLRSSLYRAGGAYGPGTPELLLEGAETVTPVLDPARR
 LTa 103 TSGIYFVYSQVVFSGKAYSPKAT--SSPLYLAHEVQLFSQY-PFHVPLLSQKMVYPGL-----
 CD40L 165 RQGLYIYIAQVTFCSNREA-----SSQAPFIASLCLKSPGR--FERILLRAANTHSSAK-----
 Apo1L 186 ETGLYFVYYSKYVFRGQSC-----NNLP[]SHKVYMRNSKY-PQDLVMMEGKMSYCTT-----
 Apo2L 178 EKGFFYIYISQTYERFQEEIKENTK--NDKQMVQYIYKYTS-Y-PDPILLMKSARNSCWSKDA----

41BBL 190 ---SEARN[]SAGFGQGRLLHLS-AGQRLGVHLHTEARARHAWQLTQGATVLGLFRVTPEIPAGLPSRSE
 OX40L 137 ---SLMVASLT[]YKDK---VYLNVT[]TDNT-S[]D[]DFHVNGGELILIHQNPGEFCVL
 CD27L 149 ---FHQGCT[]VSQRLT[]PLAR--GD[]TLCTNLTGTL-LPSRNTD-----ETFFGVQWVRP
 CD30L 180 ---GMQTKHVYQNL[]SFLLDYLQVNTTISVNVDTFQYI-DTSTFPLEN--VLSIFLYSNSD
 TNF 184 GAEAKPWYEP[]YLGGVF[]OLEK--GDRLSAEINRPDY[]-DFAESG-----QVYFGI[]IAL[]
 LTb 195 QGYGPLWYTSVGFGLVQLRR--GERVYVNI[]SHPDY[]-DFARG-----KTFFGAVMVG
 LTa 160 ---QEPWLHSMYHGA[]AFOL[]TQ--GDQLSTHTDGI[]PH[]VLSPST-----VFFGAFAL
 CD40L 217 ---PCGQ[]SIHLGGV[]FELQ[]P--GASVFNVT[]DPSQVSHGTG-----FTSFGLLKL
 Apo1L 237 ---GQMWARS[]SYLGA[]VFN[]LTS--ADHLYVNV[]SEL-SLVNFEES-----QTEFGLYKL
 Apo2L 236 ---EYGLY-SIYQGGIFELKE--NDRI[]FVS[]VTNE-HLIDMDHE-----ASFFGAFLVG

FIG. 1C

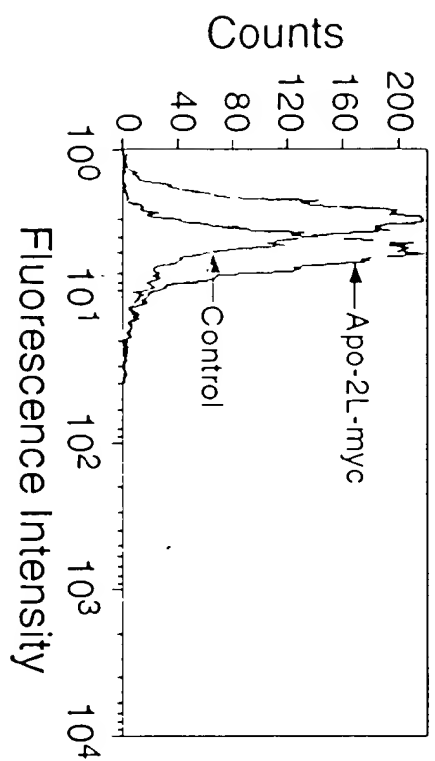


FIG. 1D

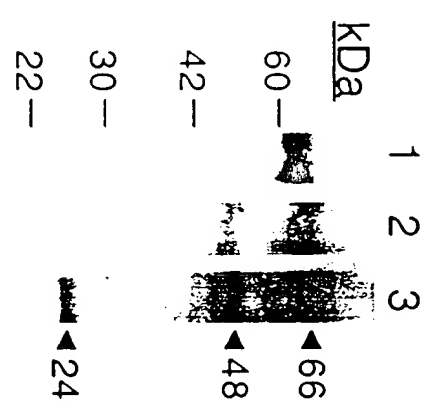
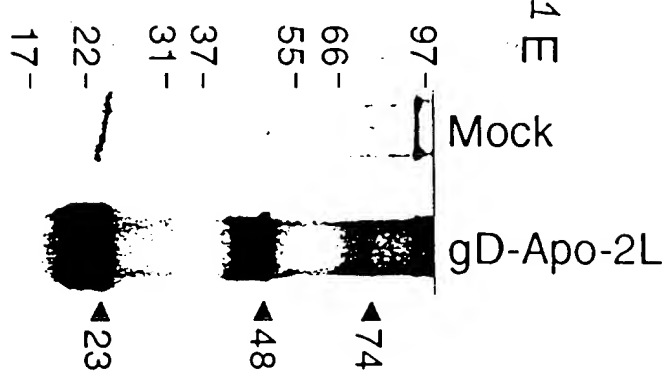


FIG. 1E



bioRxiv preprint doi: <https://doi.org/10.1101/111111>; this version posted November 11, 2016. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

FIG. 2A 9D cells

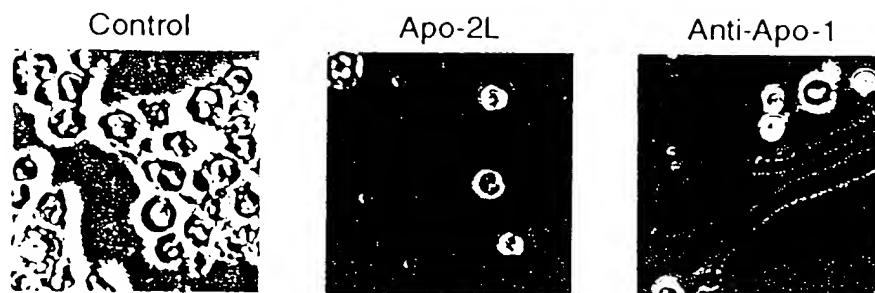


FIG. 2B 9D cells

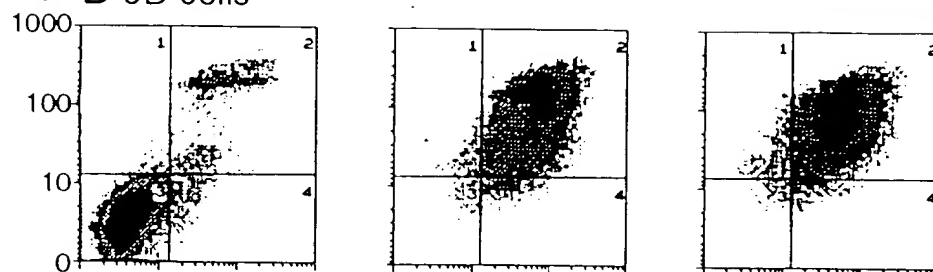


FIG. 2C Raji cells

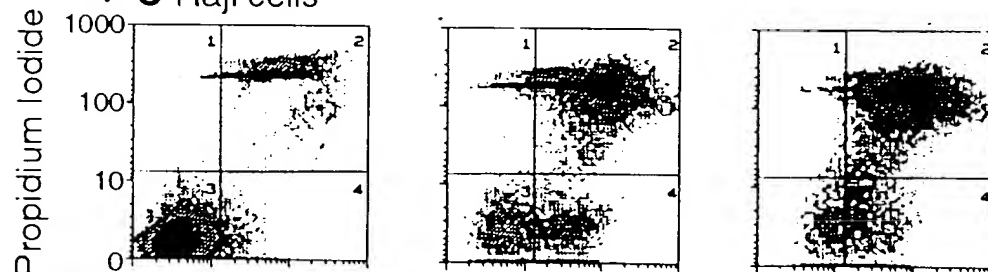


FIG. 2D Jurkat cells

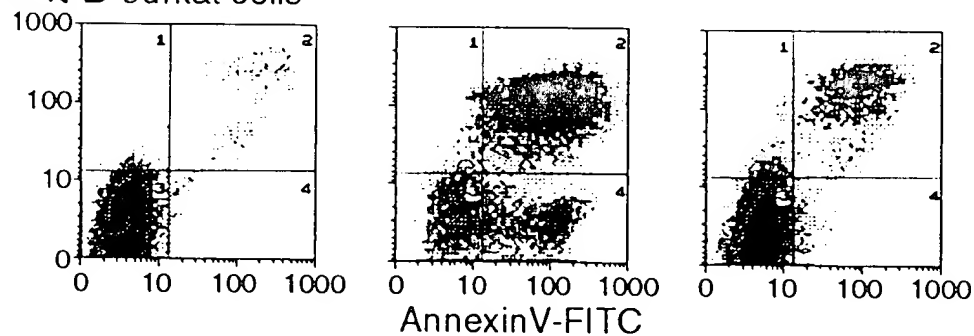


FIG. 2E

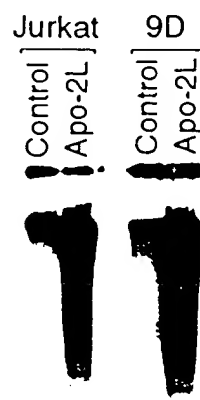


FIG. 3 A

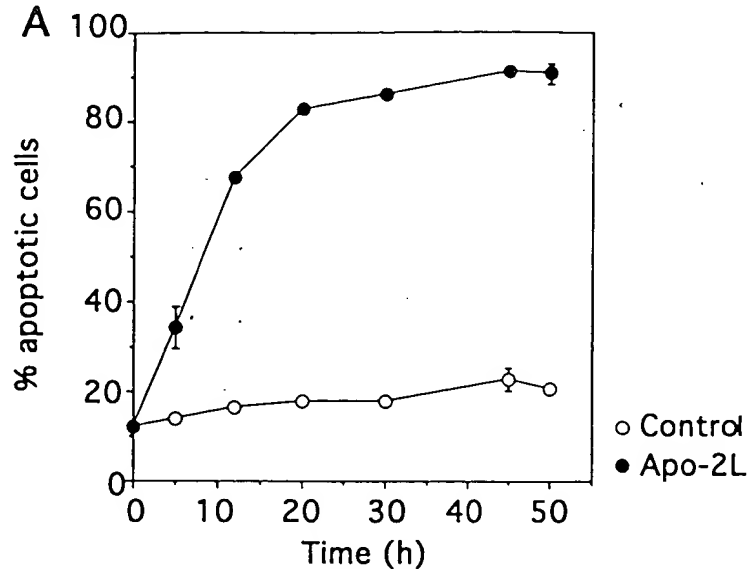


FIG. 3 B

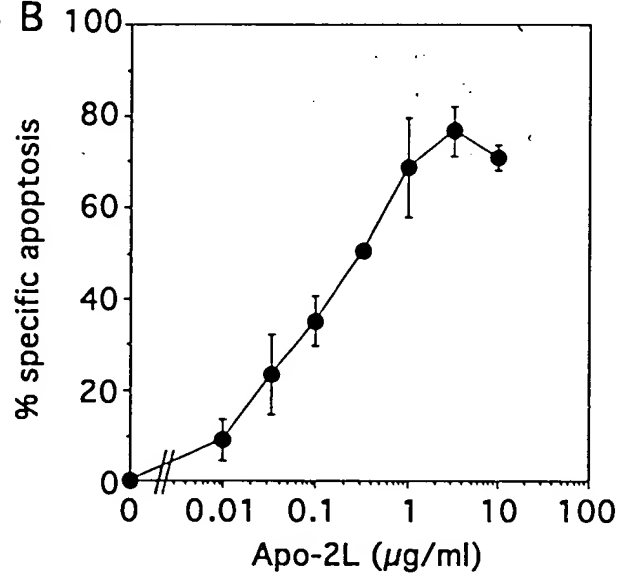


FIG. 3 C

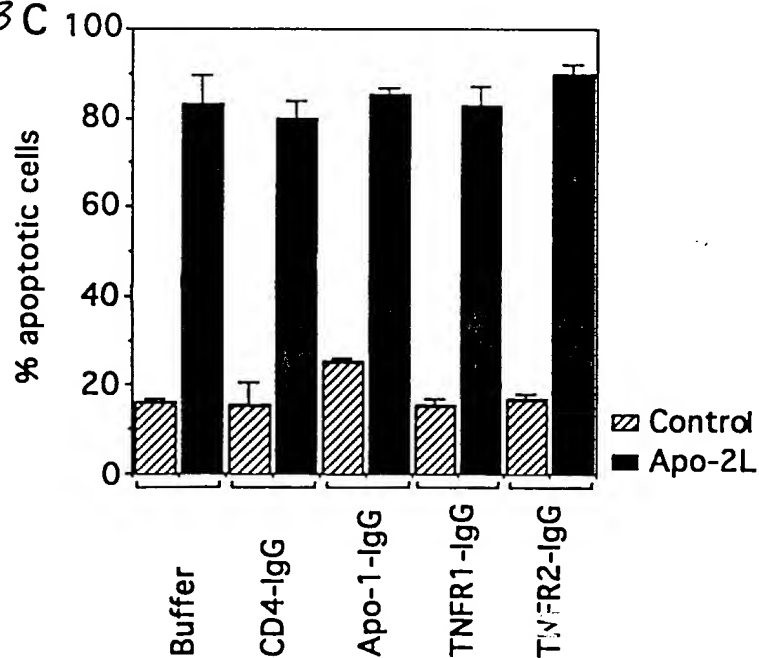


FIG. 4

